



**UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office**

Addr ss: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

SN

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
-----------------	-------------	----------------------	---------------------

09/351,102 07/08/99 BONKOWSKI

R 13676.142

022913 IM22/0814
WORKMAN NYDEGGER & SEELEY
1000 EAGLE GATE TOWER
60 EAST SOUTH TEMPLE
SALT LAKE CITY UT 84111

EXAMINER

CHEVALIER, A	
ART UNIT	PAPER NUMBER

1772
DATE MAILED:

12
08/14/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/351,102

Applicant(s)

BONKOWSKI ET AL.

Examiner

Alicia Chevalier

Art Unit

1772

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-52 is/are pending in the application.
- 4a) Of the above claim(s) 7, 14-17 and 23-52 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-6, 8-13 and 18-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121: _____

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☒ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 4, 6-8.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I and Species A, C, and E in Paper No. 11, claims 1-6, 8-13, and 18-22, is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1, 2, 4-6, 8, 9, 19, and 20 are rejected under 35 U.S.C. 102(b) as being anticipated by Sylvester et al. (3,011,383).

Sylvester et al. discloses a decorative optical material comprising a semi-transparent metallic layer (reflector layer), a dielectric layer, an opaque metallic layer (absorber layer), a vinyl plastic coating (light transmissive substrate), and a fabric backing (release layer) (col. 7, line 54 to col. 8, line 12). The vinyl plastic coating layer is imparted with a predetermined embossed pattern (diffraction grating pattern) on the side opposite the semi-transparent metallic layer, a dielectric layer, and an opaque metallic layer (col. 8, lines 2-12 and figure 4 and 6). The semi-transparent layer can be aluminum, Inconel, chromium, or titanium with a thickness of

Art Unit: 1772

about 75 to 250 Angstrom units, but the thickness is not critical (col. 4, lines 48-65 and col. 5, lines 60-65)). The dielectric layer is made of materials with lower refractive indices such as magnesium fluoride, calcium fluoride, and zinc sulfide (col. 4, lines 66-75 and col. 5 line 70 to col. 6, line 2). The opaque metallic layer can also be aluminum and have thickness about 250 Angstrom units (col. 5, lines 3-13).

Claim Rejections - 35 USC § 102/103

4. Claims 12 and 13 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Sylvester et al. (3,011,383).

Sylvester disclose the all the limitation of the instant claimed invention except for the claimed index of refraction. Although Sylvester et al. does not explicitly teach the limitation the dielectric layer has an index of refraction of about 1.65 or less, it is reasonable to presume that said limitations are inherent to the invention. Support for said presumption is found in the use of similar materials (i.e. magnesium fluoride and calcium fluoride) and in the similar production steps (i.e. Vapor depositing) used to produce the dielectric layer. The burden is upon the Applicant to prove otherwise. *In re Fitzgerald*, 205 USPQ 594. In the alternative, the claimed index of refraction would obviously have been provided by the process disclosed by Sylvester and the fact that he wants to also keep the refractive index low. Note *In re Best*, 195 USPQ 433, footnote 4 (CCPA 1977) as to the providing of this rejection under 35 USC 103 in addition to the rejection made above under 35 USC 102.

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sylvester et al. (3,011,383).

Sylvester et al. discloses the claims invention except for substrate being on of the claimed plastic material in claim 3. It would have been obvious to one having ordinary skill in the art at the time the invention was made to the substrate from one of the claimed plastic materials, since it have been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416. One of ordinary skill in the art would be motivated to use one of the claimed materials depending on the different optical characteristics desired, i.e. color shift, for the intended use of the decorative article of Sylvester et al.

7. Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sylvester et al. (3,011,383).

Sylvester et al. discloses the claims invention except for claimed absorber layer material in claim 10. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use one of the materials claimed in claim 10 as the absorber layer material, since it have been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416.

Art Unit: 1772

One of ordinary skill in the art would be motivated to use one of the claimed materials depending on the different optical characteristics, i.e. color shift, desired for the intended use of the decorative article of Sylvester et al.

Sylvester et al. discloses the claimed invention except that the absorber layer material is aluminum instead of chromium, nickel, palladium, etc. Coulter et al. (6,150,022) show that aluminum and chromium, nickel, iron, titanium, etc. (col. 9, lines 65-68) are equivalent materials for absorber layers known in the art. Therefore, because these materials were art-recognized equivalents at the time the invention was made, one of ordinary skill in the art would have found it obvious to substitute chromium, nickel, iron, titanium, etc. for aluminum. One of ordinary skill in the art would be motivated to use one of the claimed materials depending on the different optical characteristics, i.e. color shift, desired for the intended use of the decorative article of Sylvester et al. Also, one of ordinary skill in the art would have been motivated to use one of the claimed materials because they all have a similar optical characteristic.

8. Claims 11, 18, and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sylvester et al. (3,011,383).

Sylvester et al. discloses the claims invention except for the claimed thickness of the absorber layer, dielectric layer, and reflector layer. The exact thickness of all the layers is deemed to be a cause effective variable with regard to the optical shifting property. It would have been obvious to one having ordinary skill in the art to have determined the optimum value of a cause effective variable such as combined thickness of the layers through routine experimentation in the absence of a showing of criticality in the claimed thickness. *In re Boesch*, 205 USPQ 215 (CCPA 1980), *In re Woodruff*, 16 USPQ2d 1934, 1936 (Fed. Cir. 1990).

Art Unit: 1772

9. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sylvester et al. (3,011,383).

Sylvester et al. discloses the claims invention except for reflector material is a cobalt-nickel alloy. It would have been obvious to one having ordinary skill in the art at the time the invention was made to use a cobalt-nickel alloy as the reflector material, since it have been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use. *In re Leshin*, 125 USPQ 416. One of ordinary skill in the art would be motivated to use one of the claimed materials depending on the different optical characteristics, i.e. color shift, desired for the intended use of the decorative article of Sylvester et al.

Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (703) 305-1139. The Examiner can normally be reached on Monday through Thursday from 8:00 a.m. to 5:00 p.m. The Examiner can also be reached on alternate Fridays

If attempts to reach the Examiner are unsuccessful, the Examiner's supervisor, Blaine Copenheaver can be reached by dialing (703) 308-1261. The fax phone number for the organization official non-final papers is (703) 305-5436. The fax number for after final papers is (703) 305-3599.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose phone number is (703) 308-0661.

ac

8/10/01


BLAINE COPEHEAVER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700